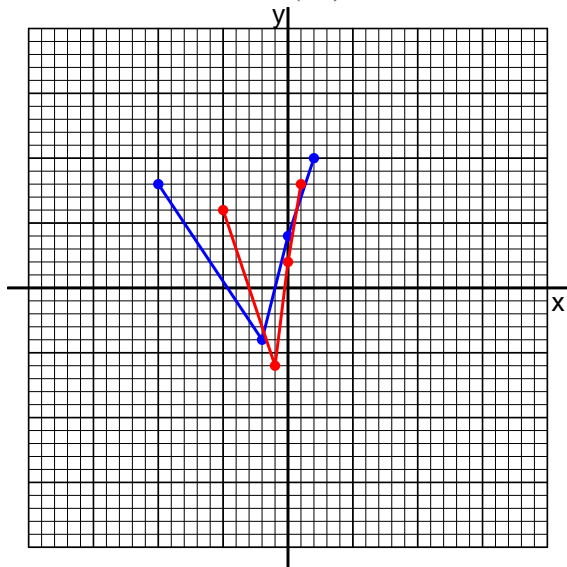
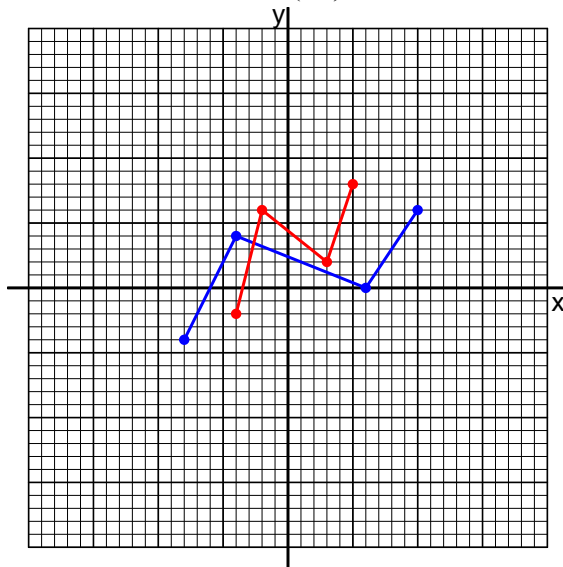


1. Each of the curves below represent a different  $y = f(x)$ . For each, draw a second curve,  $y = g(x)$ , defined by the equation above the graph.

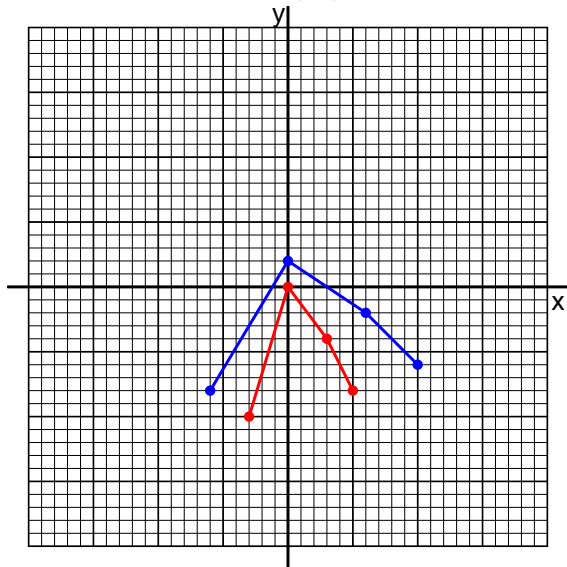
$$g(x) = f(2x) - 2$$



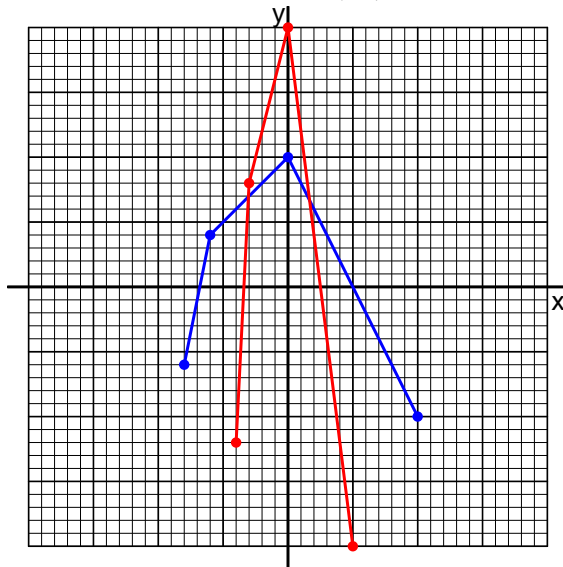
$$g(x) = f(2x) + 2$$



$$g(x) = f(2x) - 2$$



$$g(x) = 2 \cdot f(2x)$$



2. On each graph below, curve  $y = f(x)$  is shown as a dashed line with open dots at key points, and curve  $y = g(x)$  is shown as a solid line with closed dots at key points. For each, write an equation that defines  $g(x)$  as a transformation of  $f(x)$ .

